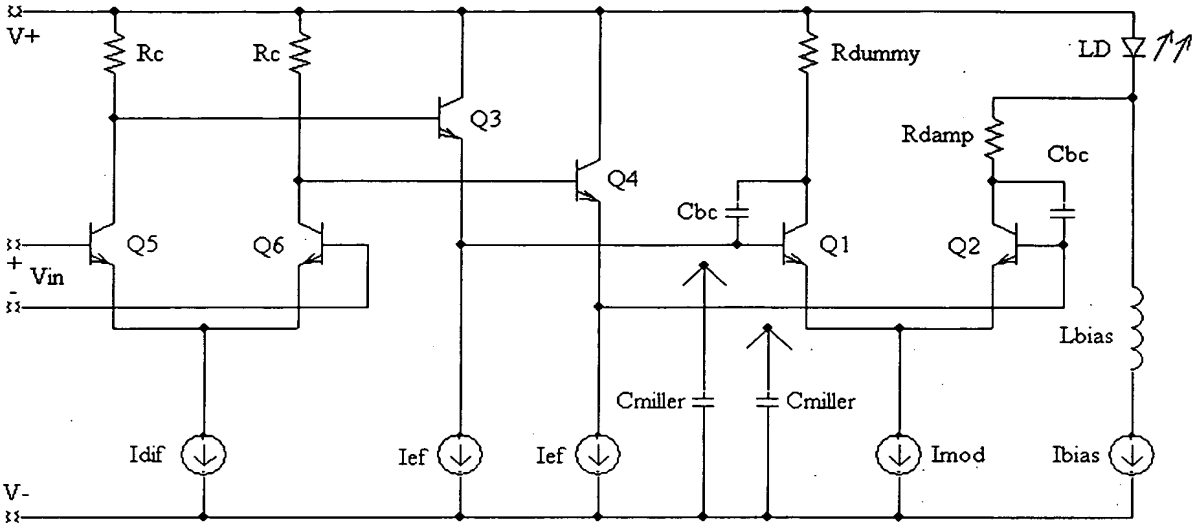

Fig.1 Prior art DC coupled laser diode driver

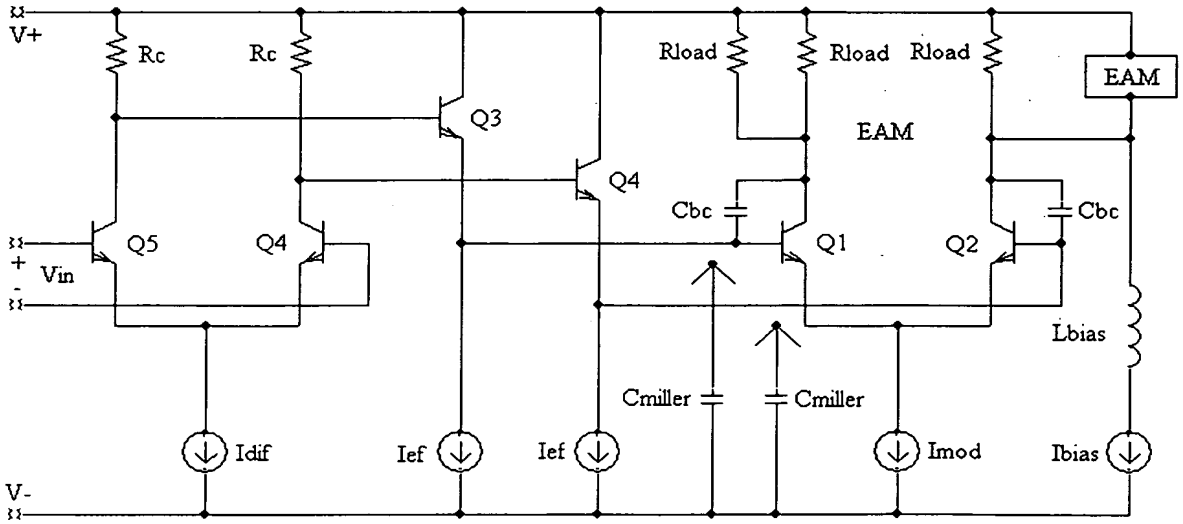

Fig.2 Prior art DC coupled EAM driver

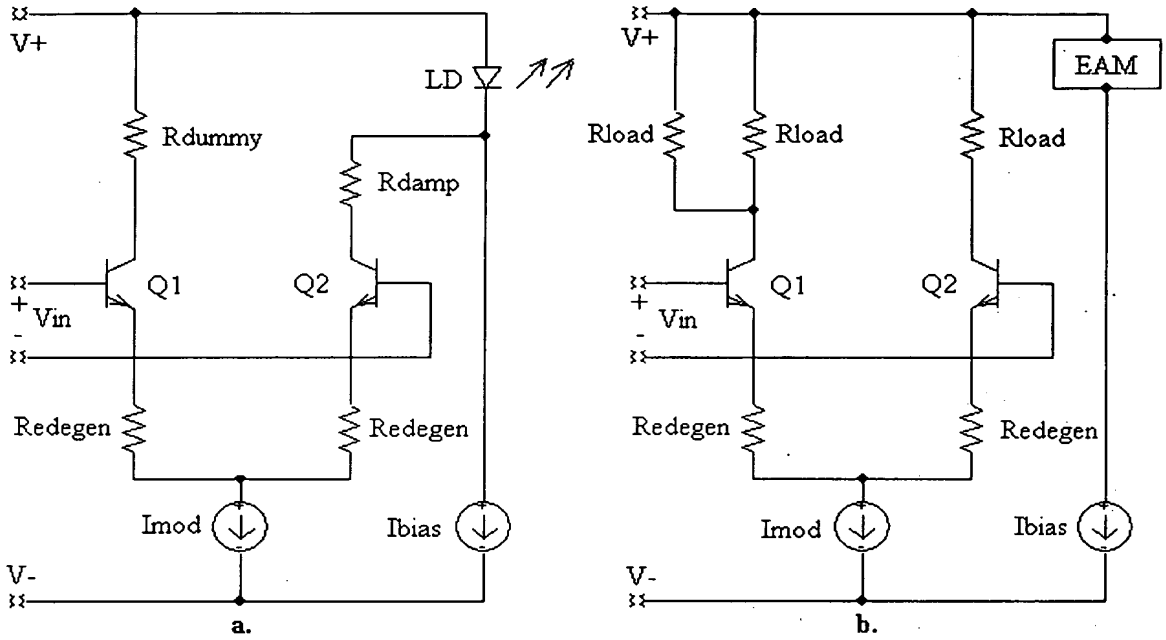

Fig. 3 Prior art output switch with emitter degeneration: a. LD driver, b. EAM driver

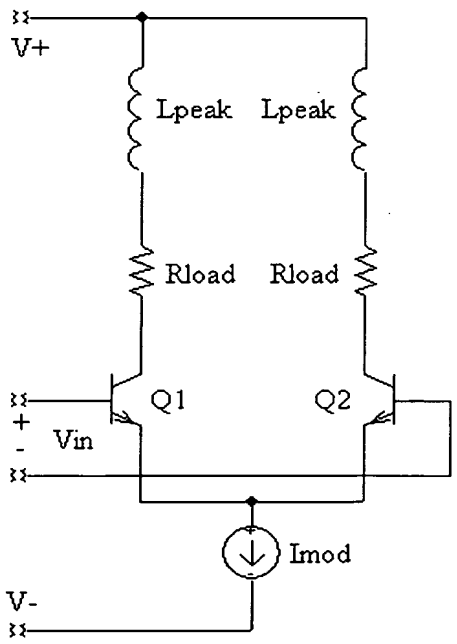

Fig. 4 Prior art output switch with inductive peaking

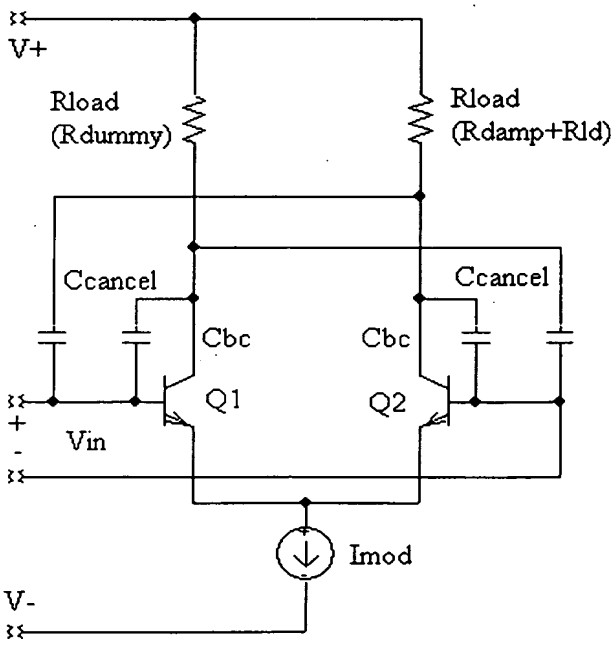

Fig. 5 Prior art output switch with Miller compensation

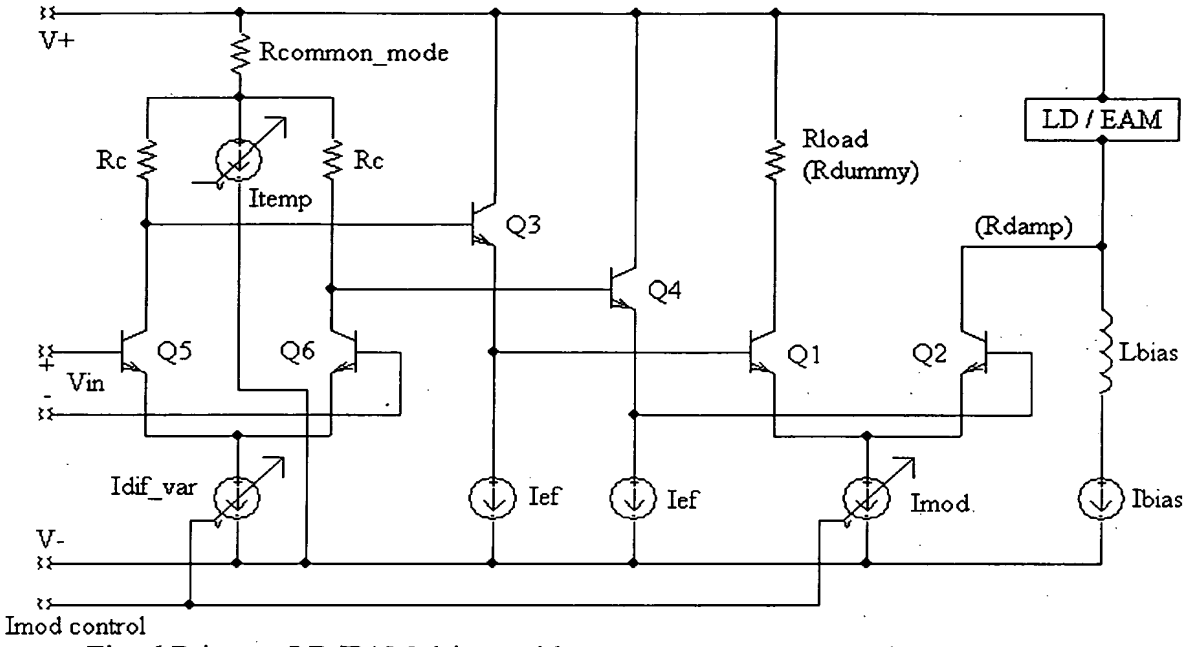

Fig. 6 Prior art LD/EAM driver with temperature compensation of the output switch headroom

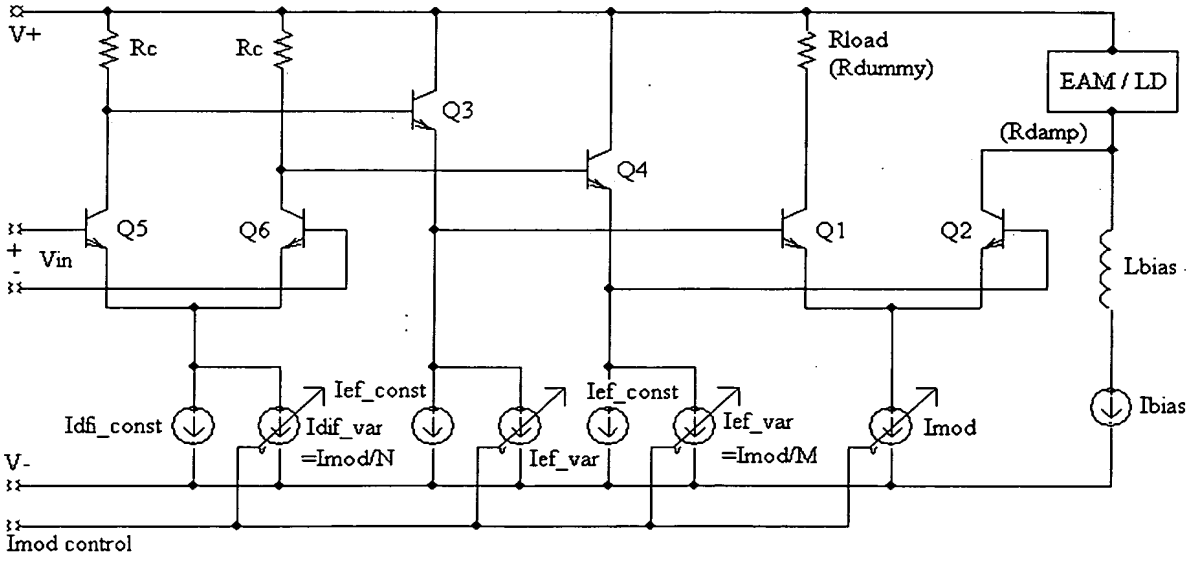

Fig. 7 Prior art LD/EAM driver with modulation current dependence of the predriver current level and voltage swing

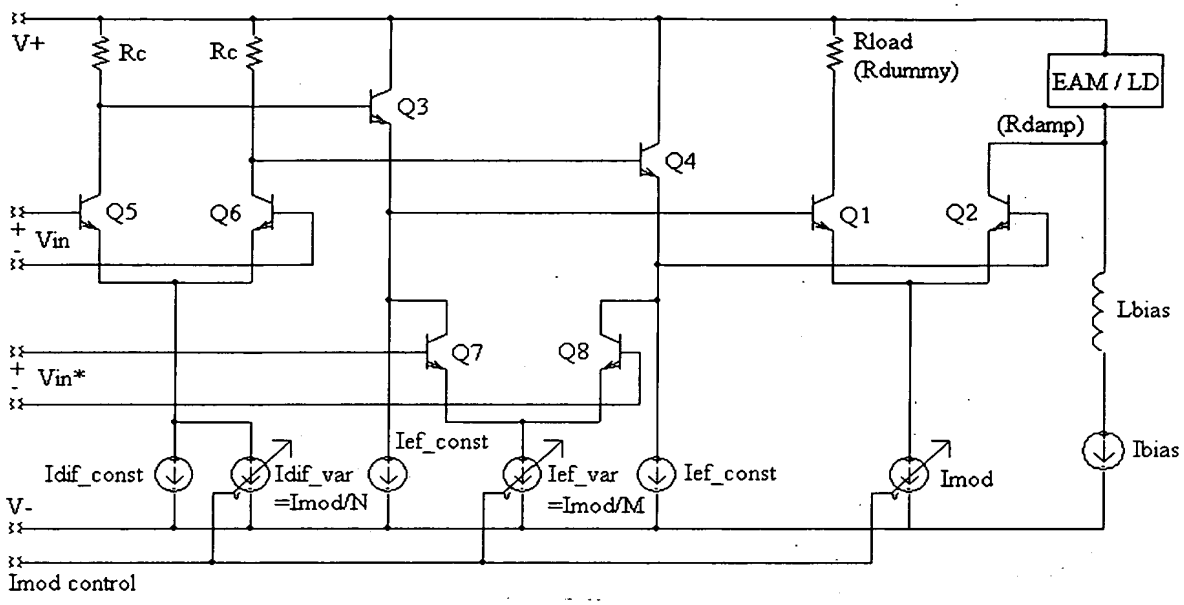

Fig. 8 Prior art LD/EAM driver with dynamic emitter follower to assure different turn-on and turn-off driving currents

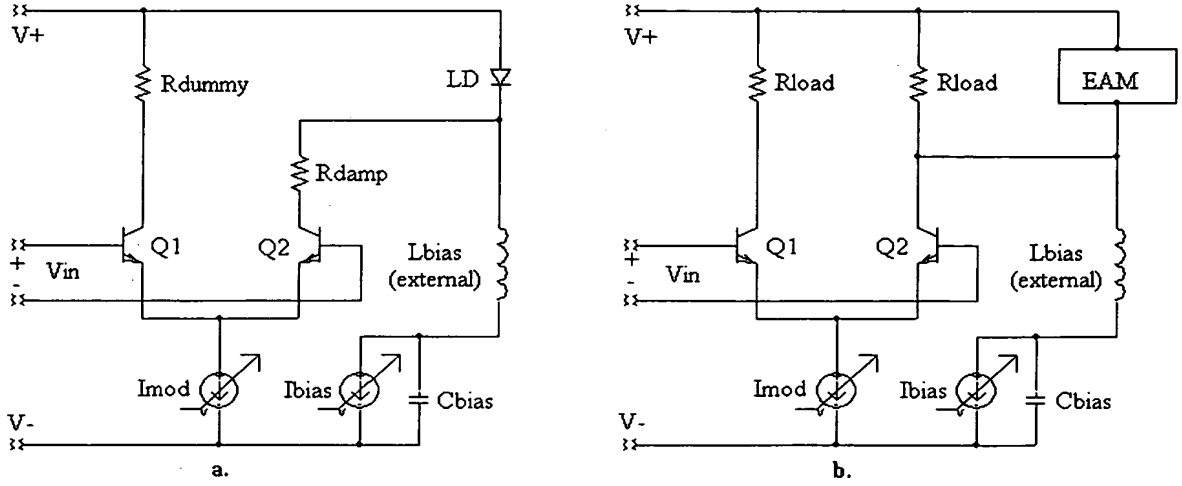

Fig. 9 Prior art LD/EAM driver with off-chip summation of the modulation and bias currents using a high value inductance

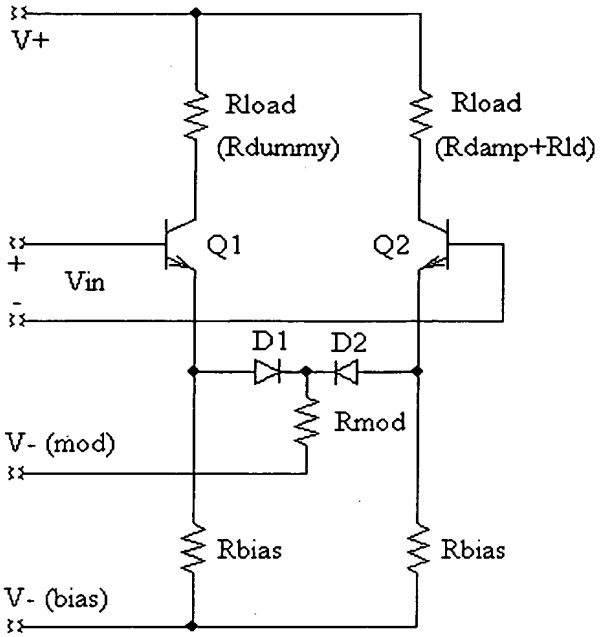

Fig. 10 Prior art LD/EAM driver that eliminates the separate bias current by using a differential pair that switches between two on-state current levels

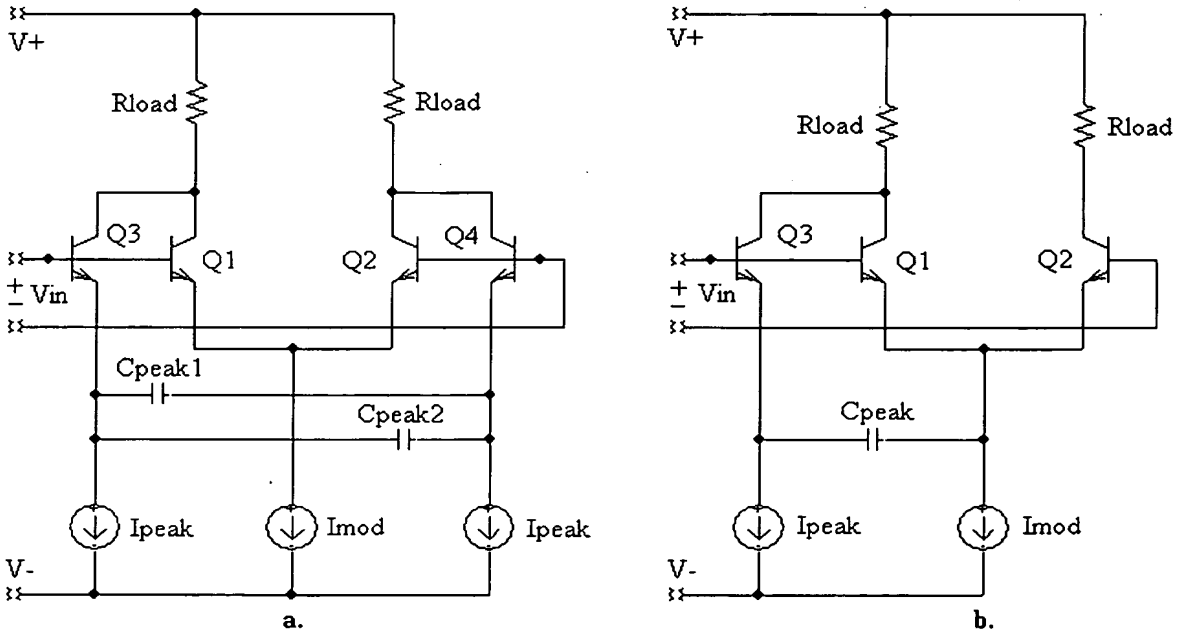

Fig. 11 Prior art dynamic emitter follower used to reduce the output overshoot: a. balanced dynamic emitter follower, b. one-sided dynamic emitter follower

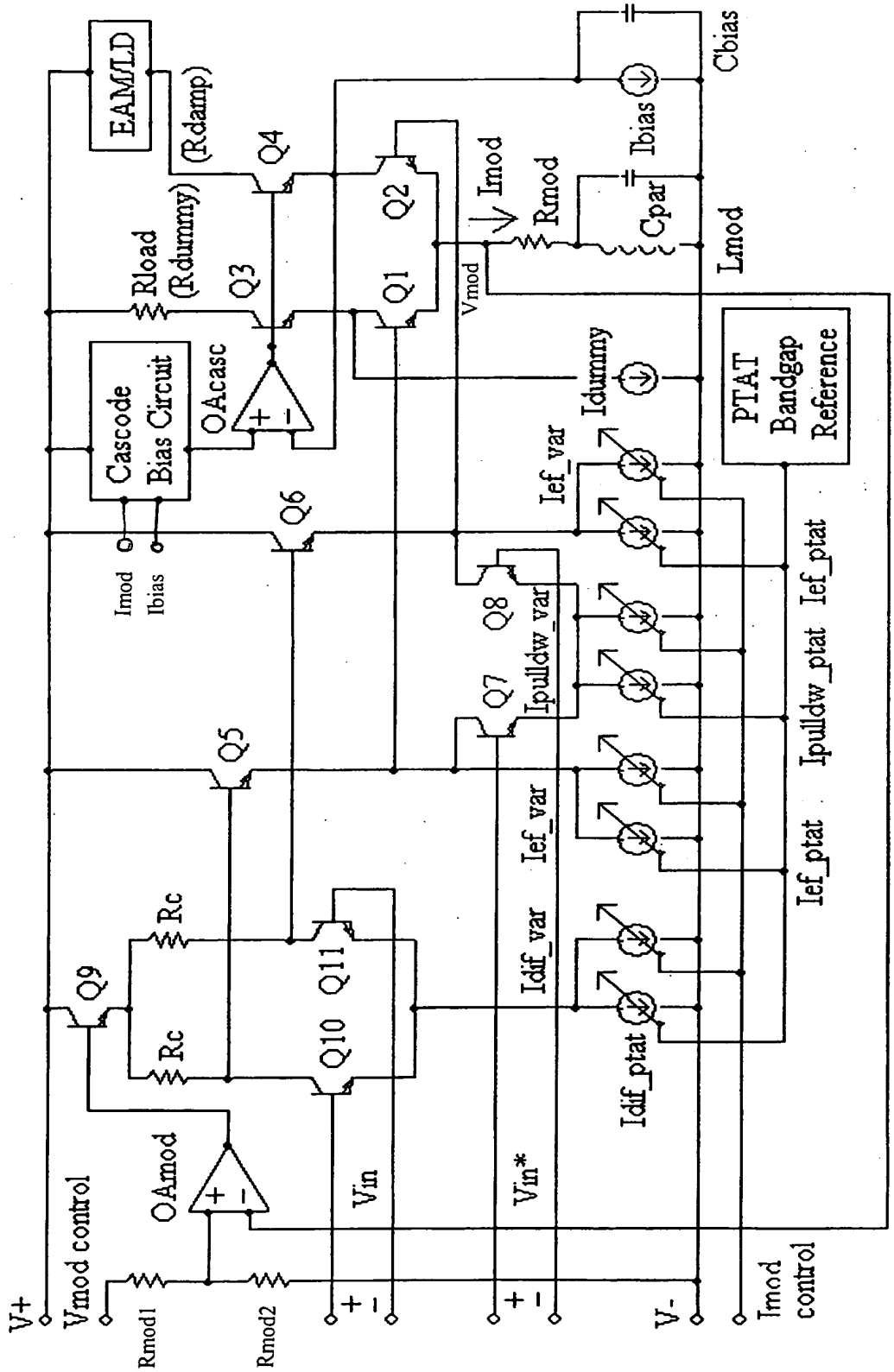

Fig.12 Cascode output switch LD/EAM driver architecture

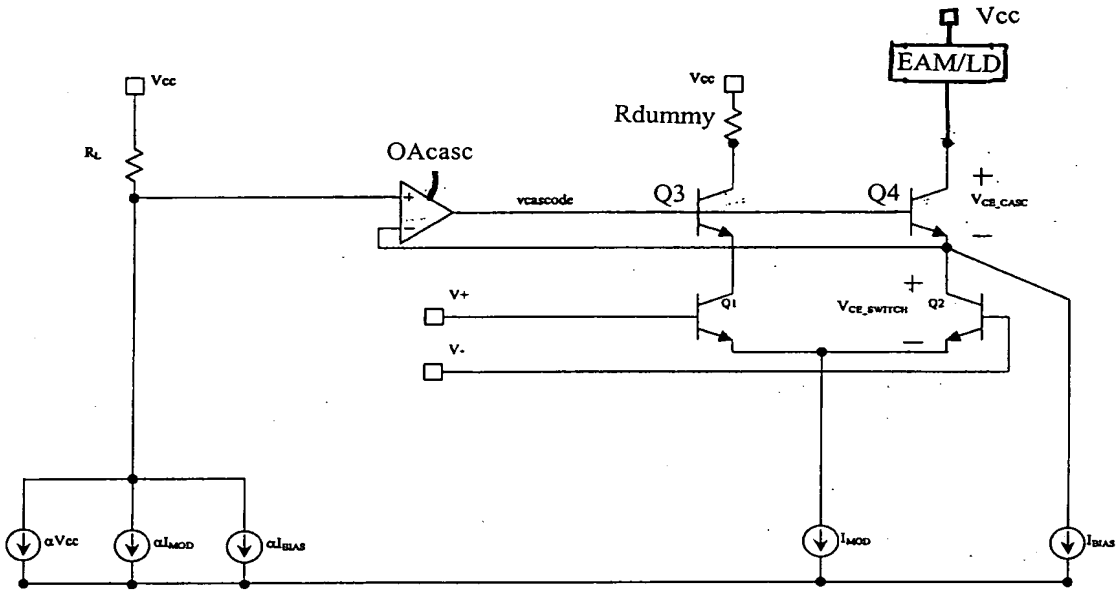

Figure 12a Cascode Bias Circuit

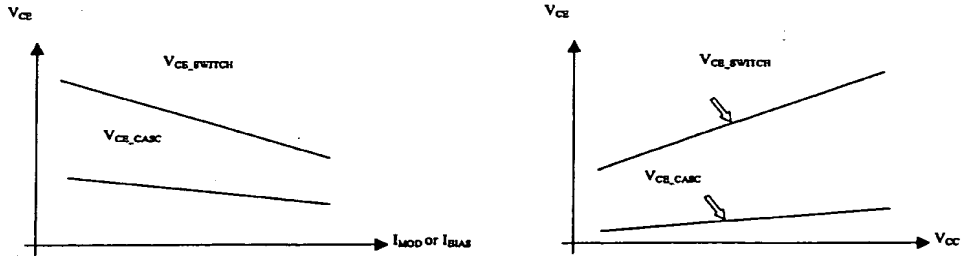

Figure 12b Cascode Bias Circuit Response

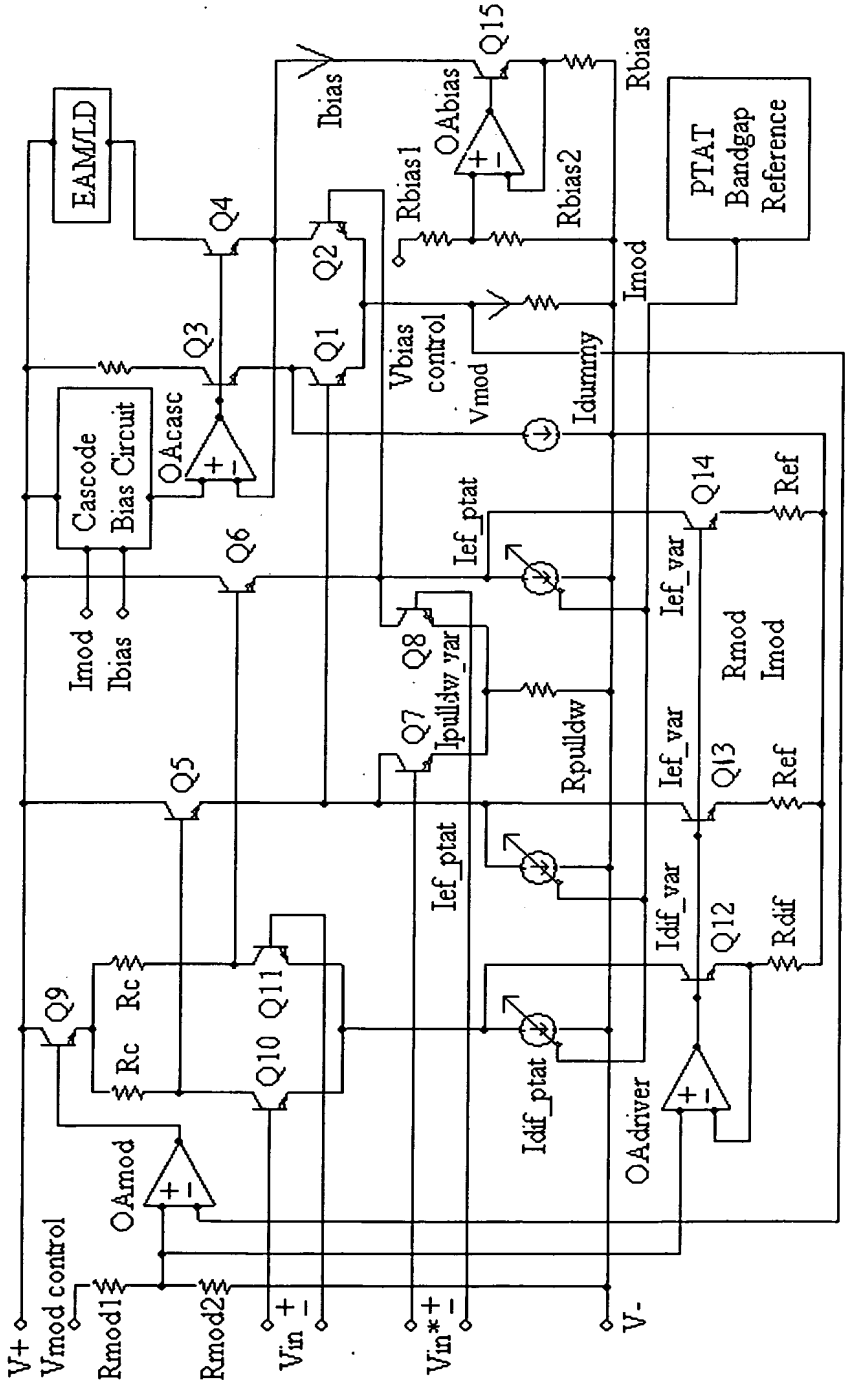

Fig. 13 First embodiment of the cascoded output switch LD/EAM driver architecture

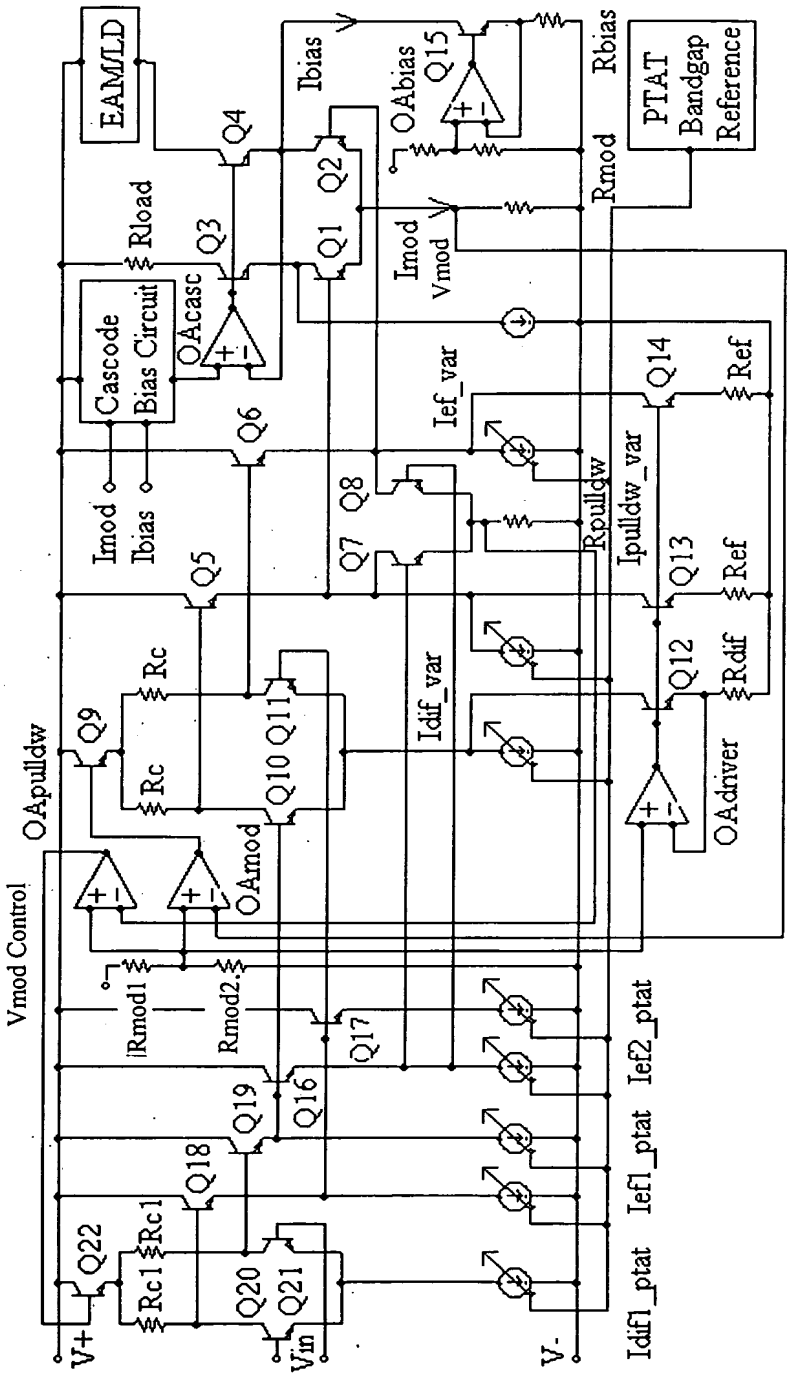

Fig. 14 Second embodiment of the cascoded output switch LD/EAM driver architecture